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14. ABSTRACT

Project CHECO was established in 1962 to document and analyze air operations in Southeast Asia. Over the years the meaning of the acronym changed several times to reflect the escalation of operations: Current Historical Evaluation of Counterinsurgency Operations, Contemporary Historical Evaluation of Combat Operations and Contemporary Historical Examination of Current Operations. Project CHECO and other U. S. Air Force Historical study programs provided the Air Force with timely and lasting corporate insights into operational, conceptual and doctrinal lessons from the war in SEA.

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PROJECT CHECO
Contemporary Historical Examination of Current Operations
REPORT

III DASC OPERATIONS
1 AUGUST 1969

HQ PACAF
Directorate, Tactical Evaluation
CHECO Division

Prepared by:
CAPTAIN LOUIS M. McDERMOTT
Project CHECO 7th AF, DOAC

DOTEC-69-58

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PROJECT CHECO REPORTS

The counterinsurgency and unconventional warfare environment of Southeast Asia has resulted in the employment of USAF airpower to meet a multitude of requirements. The varied applications of airpower have involved the full spectrum of USAF aerospace vehicles, support equipment, and manpower. As a result, there has been an accumulation of operational data and experiences that, as a priority, must be collected, documented, and analyzed as to current and future impact upon USAF policies, concepts, and doctrine.

Fortunately, the value of collecting and documenting our SEA experiences was recognized at an early date. In 1962, Hq USAF directed CINCPACAF to establish an activity that would be primarily responsive to Air Staff requirements and direction, and would provide timely and analytical studies of USAF combat operations in SEA.

Project CHECO, an acronym for Contemporary Historical Examination of Current Operations, was established to meet this Air Staff requirement. Managed by Hq PACAF, with elements at Hq 7AF and 7AF/13AF, Project CHECO provides a, scholarly, "on-going" historical examination, documentation, and reporting on USAF policies, concepts, and doctrine in PACOM. This CHECO report is part of the overall documentation and examination which is being accomplished. Along with the other CHECO publications, this is an authentic source for an assessment of the effectiveness of USAF airpower in PACOM.

Milton B Adams

MILTON B. ADAMS, Major General, USAF
Chief of Staff

DEPARTMENT OF THE AIR FORCE
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Warren H. Peterson

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(8) AFXOSO 1
(9) AFXOSS 1
(10) AFXOSV 1
(11) AFXOTR 1
(12) AFXOTW 1
(13) AFXOTZ 1
(14) AFXOXY 1
(15) AFXPD 6
(a) AFXPPGS 3

3. MAJOR COMMANDS

a. TAC

(1) HEADQUARTERS
- (a) DO 1
- (b) DPL 2
- (c) DOCC 1
- (d) DORQ 1
- (e) DIO 1

(2) AIR FORCES
- (a) 12AF
  - 1. DORF 1
  - 2. DI 1
- (b) 19AF(DI) 1
- (c) USAFSOF(DO) 1

(3) WINGS
- (a) 1SOW(DO) 1
- (b) 4TFW(DO) 1
- (c) 23TFW(DOI) 1
- (d) 27TFW(DOI) 1
- (e) 33TFW(DOI) 1
- (f) 64TAW(DOI) 1
- (g) 67TRW(C) 1
- (h) 75TRW(DO) 1
- (i) 316TAW(DOP) 1
- (j) 317TAW(EX) 1
- (k) 363TRW(DOC) 1
- (l) 464TAW(DO) 1
- (m) 474TFW(TFOX) 1
- (n) 479TFW(DOF) 1
- (o) 516TAW(DOPL) 1
- (p) 4410CCTW(DOTR) . . . 1
- (q) 4510CCTW(DO16-I) . . 1
- (r) 4554CCTW(DOI) . . . 1

(4) TAC CENTERS, SCHOOLS
- (a) USAFTAWC(DA) 2
- (b) USAFTARC(DID) . . . 2
- (c) USAFTALC(DCRL) . . . 1
- (d) USAFTFWC(CRCD) . . . 1
- (e) USAFAGOS(DAB-C) . . . 1

b. SAC

(1) HEADQUARTERS
- (a) DOPL 1
- (b) DPLF 1
- (c) DM 1
- (d) DI 1
- (e) OA 1
- (f) HI 1

(2) AIR FORCES
- (a) 2AF(DICS) 1
- (b) 15AF(DI) 1

(3) AIR DIVISIONS
- (a) 3AD(DO) 3

c. MAC

(1) HEADQUARTERS
- (a) MAOID 1
- (b) MAOCO 1
- (c) MACHO 1
- (d) MACOA 1

(2) AIR FORCES
- (a) 21AF(OCXI) 1
- (b) 22AF(OCXI) 1

(3) WINGS
- (a) 61MAWg(OIN) 1
- (b) 62MAWg(OCXP) 1
- (c) 436MAWg(OCXC) 1
- (d) 437MAWg(OCXI) 1
- (e) 438MAWg(OCXC) 1

(4) MAC SERVICES
- (a) AWS(AWXW) 1
- (b) ARRS(ARXLR) 1
- (c) ACGS(AGOV) 1
- (d) AAVS(AVODOD) 1

d. ADC

(1) HEADQUARTERS
(a) ADODC 1
(b) ADOOP 1
(c) ADLCC 1

(2) AIR FORCES
(a) AF ICELAND(FICAS) . . 2

(3) AIR DIVISIONS
(a) 25AD(ODC) 2
(b) 29AD(ODC) 1
(c) 33AD(OIN) 1
(d) 35AD(CCR) 1
(e) 37AD(ODC) 1

e. ATC

(1) HEADQUARTERS
(a) ATXPP 1

f. AFLC

(1) HEADQUARTERS
(a) MCVSS 1
(b) MCNAP 1

g. AFSC

(1) HEADQUARTERS
(a) SCLAP 3
(b) SCS-6 1
(c) SCGCH 2
(d) SCTPL 1
(e) ASD(ASJT) 1
(f) ESD(ESO). 1
(g) RADC(EMOEL) 2
(h) ADTC(ADGT). 1

h. USAFSS

(1) HEADQUARTERS
(a) ODC 1
(b) CHO 1

(2) SUBORDINATE UNITS
(a) Eur Scty Rgn(OPD-P) . . 1
(b) 6940 Scty Wg(OOD) . . . 1

i. AAC

(1) HEADQUARTERS
(a) ALDOC-A 2

j. USAFSO
(1) HEADQUARTERS
(a) COH 1

k. PACAF

(1) HEADQUARTERS
(a) DP. 1
(b) DI. 1
(c) DPL 2
(d) CSH 1
(e) DOTEC 5
(f) DE. 1
(g) DM. 1
(h) DOTECH. 1

(2) AIR FORCES
(a) 5AF(DOPP) 1
(b) Det 8, ASD(DOASD) . . . 1
(c) 7AF
1. DO 1
2. DIXA 1
3. DPL. 1
4. TACC 1
5. DOAC 2
(d) 13AF
1. CSH. 1
2. DPL. 1
(e) 7/13AF(CHECO) 1

(3) AIR DIVISIONS
(a) 313AD(DOI). 1
(b) 314AD(DOP). 2
(c) 327AD
1. DO 1
2. DI 1
(d) 834AD(DO) 2

(4) WINGS
- (a) 8TFW(DCOA) 1
- (b) 12TFW(DCOI) 1
- (c) 35TFW(DCOI) 1
- (d) 37TFW(DCOI) 1
- (e) 56SOW(WHD) 1
- (f) 347TFW(DCOOT) 1
- (g) 355TFW(DCOC) 1
- (h) 366TFW(DCO) 1
- (i) 388TFW(DCO) 1
- (j) 405TFW(DCOA) 1
- (k) 432TRW(DCOI) 1
- (l) 460TRW(DCOI) 1
- (m) 475TFW(DCO) 1
- (n) 633SOW(DCOI) 1
- (o) 1st Test Sq(A) 1

(5) OTHER UNITS
- (a) Task Force ALPHA(DXI) . . . 1
- (b) 504TASG(DO) 1

m. USAFE

(1) HEADQUARTERS
- (a) ODC/OA 1
- (b) ODC/OTA 1
- (c) OOT 1
- (d) XDC 1

(2) AIR FORCES
- (a) 3AF(ODC) 2
- (b) 16AF(ODC) 2
- (c) 17AF
  - 1. ODC 1
  - 2. OID 1

(3) WINGS
- (a) 20TFW(DCOI) 1
- (b) 36TFW(DCOID) 1
- (c) 50TFW(DCO) 1
- (d) 66TRW(DCOIN-T) 1
- (e) 81TFW(DCOI) 1
- (f) 401TFW(DCOI) 1
- (g) 513TAW(OID) 1
- (h) 7101ABW(DCO-CP) 1
- (i) 7149TFW(DCOI) 1

4. SEPARATE OPERATING AGENCIES
- a. ACIC(ACOMC) 2
- b. AFRES(AFRXPL) 2
- c. USAFA
  - (1) CMT 1
  - (2) DFH 1
- d. AU
  - (1) ACSC-SA 1
  - (2) AUL(SE)-69-108 2
  - (3) ASI(ASD-1) 1
  - (4) ASI(ASHAF-A) 2
- e. AFAFC(EXH) 1

TABLE OF CONTENTS

APPENDIXES

FIGURES

CHAPTER I

SUPPORT FOR III DASC

Introduction

The Seventh Air Force "In-Country Tactical Air Operations Handbook" (7AF Pamphlet 55-1), defines a Direct Air Support Center (DASC) as a subordinate operational component of the Tactical Air Control System (TACS) designed for control and direction of close air support (CAS) and other tactical air support (TAS) operations. III DASC was under the control of the Tactical Air Control Center (TACC) which was collocated with Headquarters, Seventh Air Force, at Tan Son Nhut Air Base, Republic of Vietnam.[1/]

Location

III DASC was located at Army of Republic of Vietnam (ARVN), III Corps Headquarters, located adjacent to Bien Hoa Air Base. The II Field Force Vietnam (FFV), located at Long Binh in the ARVN III Corps area of responsibility, was supported by III DASC.[2/]

Area of Responsibility

III DASC's area of responsibility (AR) included the Capital Military District (CMD), comprising the municipality of Saigon and Gia Dinh Province, including the Rung Sat Special Zone (RSSZ). One other autonomous municipality, that of Vung Tau, located on the South China Sea, was part of III DASC's AR. In addition to these, the following provinces were in III DASC's AR: Bien Hoa, Binh Duong, Binh Long, Binh Tuy, Hau Nghia, Long An, Long Khanh, Phuoc Long, Phuoc Tuy, and Tay Ninh.[3/]

Within III DASC's area of responsibility, a unique situation existed. In addition to the normal tactical control activities of a DASC, a heavy concentration of nontactical air traffic (commercial civilian aircraft, cargo flights, reconnaissance, etc.) was generated at Tan Son Nhut and Bien Hoa Air Bases, two of the most heavily trafficked airports in the world. This further restricted the freedom of combat flight activity. The III Corps Tactical Zone (CTZ) also contained the major population centers of Saigon, Tay Ninh City, and the Bien Hoa-Long Binh complex. The relatively dense civilian population in the III Corps area imposed severe restrictions on the employment of airstrikes, and made it difficult for Forward Air Controllers (FACs) to perform the strike portion of their mission.[4/]

ARVN Forces

Under Hq, III CTZ, in addition to the ARVN Divisions, and subordinate to them, were several Sectors, comprising geographical separations within the zone. Collocated with ARVN Division and Sector Tactical Operations Centers (TOCs) were USAF Tactical Air Control Parties (TACPs). (Fig. 2.) The 5th, 18th, and 25th ARVN Divisions were deployed strategically across III Corps, while the ARVN Airborne Division was located at Tan Son Nhut in the Capital Military District.[5/] This division was under the direct command of the ARVN Joint General Staff (JGS) and constituted the strategic reserve force, available for quick reaction to counter enemy initiatives anywhere in the Republic. It was, however, considered by the JGS as a key element in the defense of the highly strategic capital region itself. In the event of a brigade being deployed, a USAF TACP was necessarily sent with it.[6/]


III CORPS
SOUTH VIETNAM
I
II
III
IV
N
CAMBODIA
PHUOC BINH
AN LOC
BINH LONG
PHUOC LONG
14
II CORPS
TAY NINH
13
13
TAY NINH
BINH DUONG
LONG KHANH
20
BINH TUY
13
PHU CUONG
XUAN LOC
KHIEM CUONG
1
BIEN HOA
1
1
HAU NGHIA
GIA DINH
HAM TAN
IV CORPS
LONG AN
SAIGON
BIEN HOA
PHUOC TUY
4
GIA DINH
PHUOC LE
TAN AN
VUNG TAU
CAPITAL SPECIAL ZONE

FIGURE I

III CORPS ALO SYSTEM(ARVN)

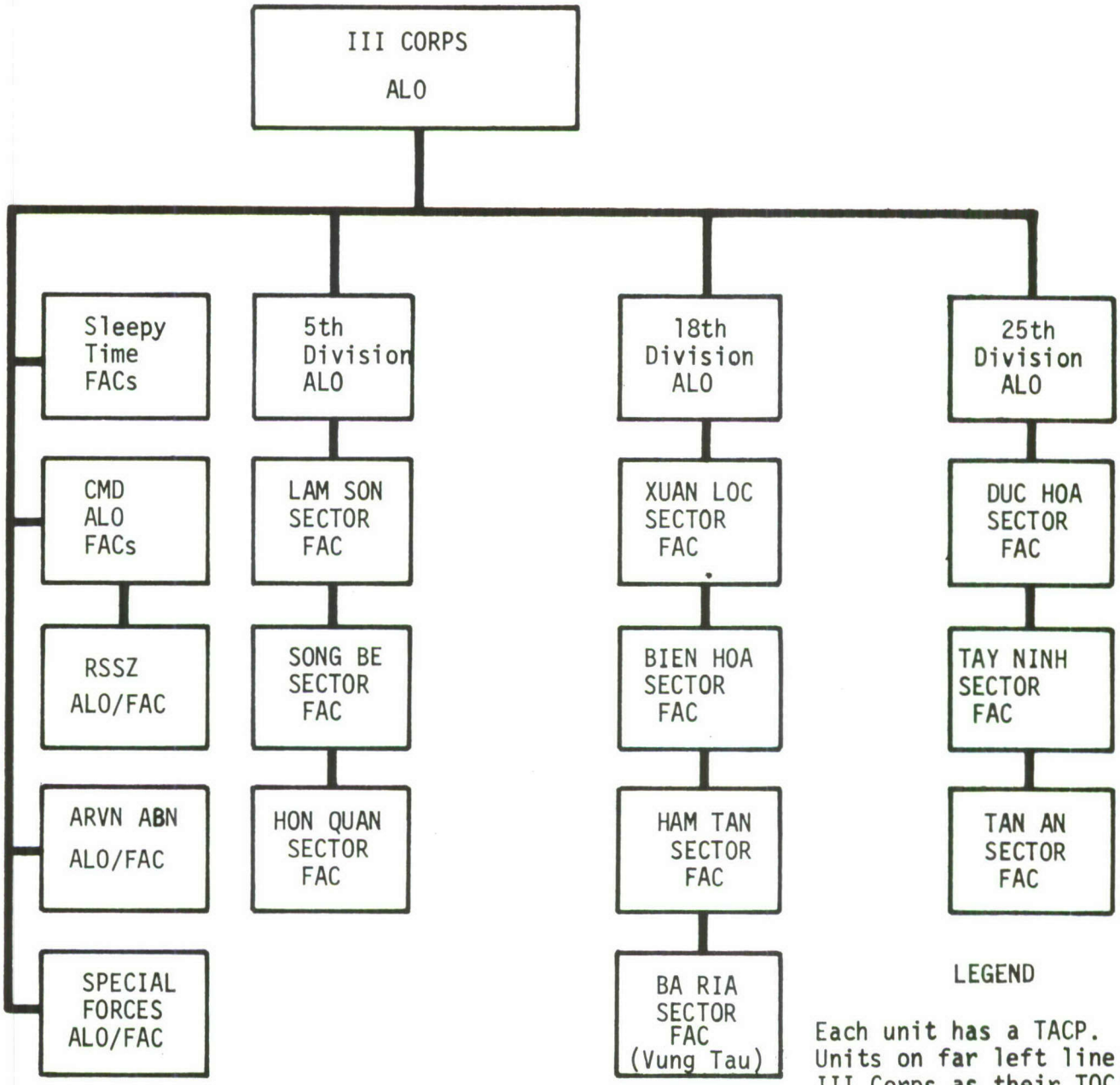

FIGURE 2

The 5th ARVN Division was headquartered at Lam Son, with Sector TOC/TACPs at Lam Son, Hon Quan, and Song Be. The 18th ARVN Division was headquartered at Xuan Loc, capital of Long Khanh Province. Its sector TOC/TACPs were at Xuan Loc, Ham Tan--capital of Binh Tuy Province, and Ba Ria, (Phuoc Le) capital of Phuoc Tuy Province. Due to an inadequate runway and dangerous crosswinds, the TACP for Ba Ria Sector was located at Vung Tau. The 25th ARVN Division Headquarters was located at Duc Hoa, in Duc Hoa Province. It had a TACP at Duc Hoa, a Sector TOC/TACP at Tan An, capital of Long An Province, and a Sector TOC/TACP at Tay Ninh--capital of Tay Ninh Province. The Capital Military District Force's TOC/TACP was at Tan Son Nhut Air Base on the outskirts of Saigon. The III Corps ALO/FAC system also had a TACP at Nha Be, for coordination of air activity in the Rung Sat Special Zone-a USN and RVNN area of responsibility.[7/] In addition to these regular ARVN forces, the 5th Special Forces Group, headquartered at Bien Hoa, had 19 installations in III Corps AR and four "B" detachments, located at Long Hai, Tay Ninh, Hon Quan, and Song Be. Song Be had four "A" detachment camps in its area.

The 5th SFGA performed its mission through three types of detachments. "C" detachments were collocated with the VNSF Headquarters for each of the four Corps Tactical Zones (CTZs) located at: Da Nang, Pleiku, Bien Hoa, and Can Tho. Next down the chain of command were the "B" detachments that advised in the command and control of both CSFs and MSFs; a "B" detachment may have been assigned either to a single Mobile Strike Force Command, or it may have advised in the command of a number of Camp Strike Forces. At the lowest level, the Camp Strike Force was advised by an "A" detachment. Hon Quan supported four

"A" detachments and Tay Ninh, because of its proximity to the Cambodian Border, had seven "A" detachments.[8]

Free World Forces

The II FFV, headquartered at Long Binh, also received air support through III DASC. In 1968, II FFV had 53 maneuver battalions.[9] The II FFV had four American divisions, a Brigade (Bde) of the 9th U.S. Division, the 11th Armored Cavalry Regiment, the 199th Light Infantry Brigade, the First Australian Army Task Force, The Royal Thailand Army Volunteer Force, the 3d Battalion of the 17th Brigade of the 1st Air Cavalry, and the Capital Military Assistance Command. The First Infantry Division had 4 TACPs assigned to it. The 9th Infantry Division had five TACPs, the 25th U.S. Inf Div, 4 TACAPs. In 1968, the 101st Air Cav Div had 1 TACP, the 11th ACR-1 TACP, and the 3/17th Air Cav-1 TACP.[10] (Fig. 3).

Border Restriction

The heavy civilian population present in III Corps, especially in the urban areas of Saigon, Tay Ninh, Xuan Loc, and Cu Chi, the saturation of the limited airspace due to extremely heavy fixed-wing, not to mention helicopter operations, and III DASC's support of the largest combined military operation in RVN, presented enough problems for any DASC to handle. However, III DASC's[11] AR abutted the Cambodian Border, beyond which the VC/NVA forces could regroup and resupply. Combat air activity in the Cambodian Border area was governed by the Rules of Engagement (ROE) for the Cambodian/RVN areas, which were established by MACV. Crossing into Cambodian airspace was authorized "...when actually engaged in combat, combat...being characterized by an actual exchange

II FFV ALO/FAC SYSTEM IN III CORPS (Dec 68)

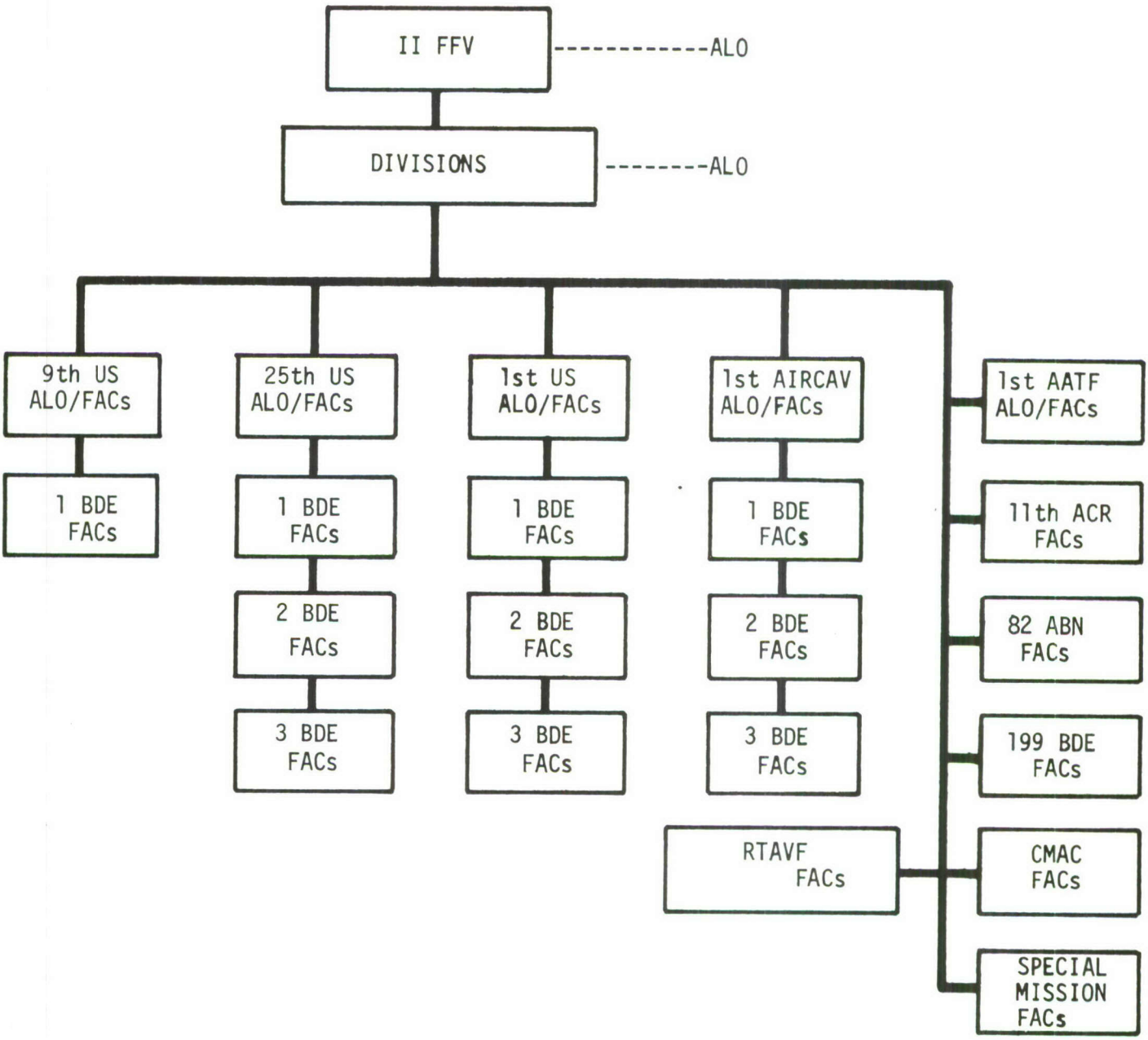

FIGURE 3

of fire".[12] While over Cambodian airspace, III DASC-controlled aircraft were not authorized to fire upon enemy aircraft or installations unless fired upon and "...then only to extent necessary for self-defense".[13] Every preplanned or immediate target within one kilometer of the Cambodian Border had to be cleared by Hq 7AF. It was the responsibility of the TACP to relay the target description and its coordinates (encoded when appropriate) to III DASC. After obtaining 7AF approval/disapproval, III DASC notified the TACP.[14]

USAF Units Supporting III DASC

The tactical air for III DASC operations came predominantly from five air bases. The 3d Tactical Fighter Wing (TFW) at Bien Hoa Air Base, RVN, supplied 33 percent of the sorties used by III DASC. The majority of scrambled sorties for III Corps/II FFV units originated at Bien Hoa. The 35th TFW and Australian Air Force planes at Phan Rang Air Base, RVN, supplied 34 percent of the sorties used by III Corps/II FFV. The majority of preplanned sorties for III DASC originated at Phan Rang. The F-4s of the 12th TFW at Cam Ranh Bay Air Base, RVN supplied 7 percent of the (mostly preplanned) sorties for III DASC. The remaining 26 percent of the sorties in support of operations in III DASC's AR were about equally divided between the 31st TFW at Tuy Hoa Air Base, RVN, and the 37th TFW at Phu Cat Air Base, RVN.[15]

CHAPTER II

PROCEDURES

In South Vietnam, the Tactical Air Control System evolved so as to keep pace with increased mission requirements and tactical air operations in support of ARVN and Free World Forces. It was designed to achieve responsive and comprehensive control of all tactical air in Southeast Asia.[1/] The TACS in South Vietnam was a joint VNAF/USAF operation, with the Tactical Air Control Center located at Tan Son Nhut Air Base. Of importance to this report is the relationship between TACC and the Corps DASCs. The DASCs were operationally subordinate to the TACC.[2/] III DASC was a joint VNAF/USAF operation, with a VNAF DASC Director and a USAF Deputy Director.[3/] Operational control of USAF assets was maintained through the Deputy Director of III DASC from the TACC. The III DASC Deputy Director controlled the air war in his Corps area. The command lines went from the DASC Deputy Commander to the Air Liaison Officer (ALO), II FFV for U.S. and Free World Forces and through III Corps ALO for ARVN units.[4/]

Because of the dual ALO/FAC system, there were basically two procedures for requesting immediate air strikes (IAS) to support troops in contact (TIC). In both systems, the initiator of the request for IAS/TIC was the ground forces commander at the level where hostilities occurred. Coming up through the chain of command, variations in the system occurred. Twelve different routing combinations were possible when a request for IAS/TIC was made.[5/]

When the request for IAS/TIC originated with an ARVN unit, the ARVN ground

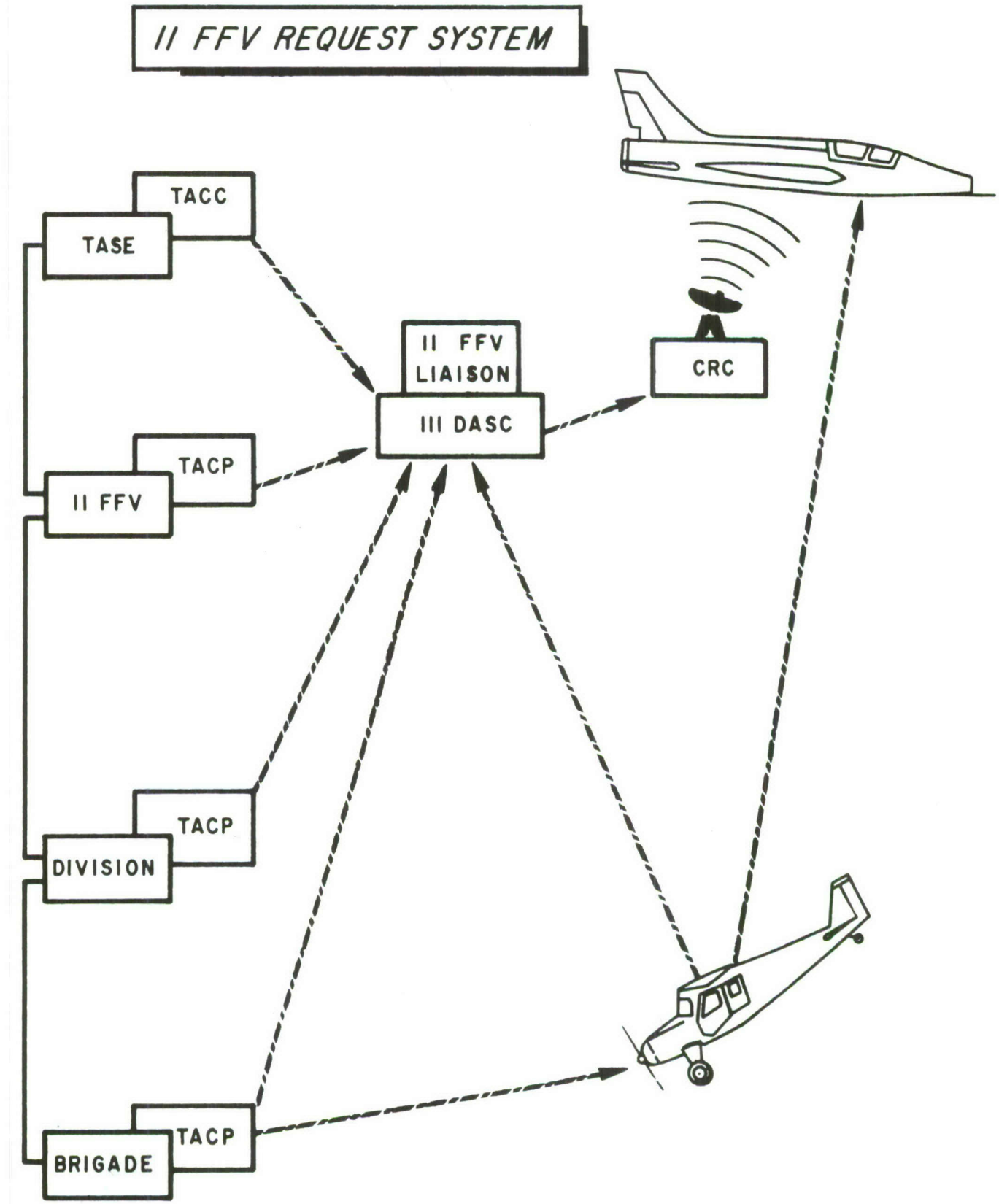
II FFV REQUEST SYSTEM
TACC
TASE
II FFV LIAISON
III DASC
CRC
TACP
II FFV
TACP
DIVISION
TACP
BRIGADE
PREPLANNED
IMMEDIATES

FIGURE 4

forces commander and his U.S. adviser had to agree that air was needed. If a FAC were airborne, they gave him the request. The FAC relayed the request to the TACP located at the sector or division TOC. If the TACP/TOC were located at the Sector level, after the ARVN Sector approved the request, it was forwarded to the Division TOC/TACP for Division approval. After approval at Division level, the request was forwarded to III Corps TOC/TACP for its approval.[6] During the clearance process, the USAF side of the system requested air before full clearance was received. Only rarely was an IAS/TIC request refused at one of the levels in the ARVN chain of command. Although the procedure sounds complicated, it normally added only five minutes to the process. When the request for IAS/TIC reached III DASC, it was passed to TACC for a scramble, if no diverts were available.[7] Normally during the day, two-thirds of all IAS/TIC requests were filled by divert aircraft.[8] Once TACC scrambled or III DASC diverted, there was only one procedure in use.

For those units assigned to II FFV, there was a slightly different procedure. The ground forces commander, at the level where the action occurred, initiated the request for IAS/TIC. (Fig. 4). Normally, he called an airborne FAC, because the FAC was usually the best means of communication available. Whether he called a FAC or called Brigade TOC directly, the request had to go through the Brigade TOC. If the FAC relayed the request, it went to the Brigade TACP which was collocated with the Brigade TOC.[9] From this point, two avenues were open. The Brigade TOC could elect to use the Direct Air Request Net (DARN). This net connected all III Corps USAF TACPs to III DASC and provided the DASC with a direct communications link to the TACPs. Normally, when TACP called DARN for an IAS/TIC, a request number was transmitted. This request

number was in essence Brigade clearance for IAS/TIC sorties. The TACP at the Division monitored the request. After receiving the request, the DARN personnel hand-carried the report to the III DASC Command Post, a walk of 20 seconds. Once the divert or scramble aircraft was received, the III DASC Duty Officer relayed this information to the DARN. Then, the call sign and ordnance the aircraft carried, were transmitted to the TACP, and from there, they were relayed to the FAC.[10/]

If the Brigade TOC elected to go through the Division TOC, the Brigade TOC passed the request to the Division. If the Division approved (no incident listed when it did not), the Division TACP had direct communication with III DASC Command Post. There was no requirement for ARVN approval in a Division's Area of Operations (AO).[11/] The Division TACP relayed the request to III DASC. II FFV had a G-3 air representative adjacent to the DASC Duty Officer. When the request for IAS/TIC arrived, the G-3 air representative did all the necessary coordination right at III DASC. If he were not available, III DASC had a hot line to G-3, II FFV, at Long Binh. The Brigade TOC did not have to go through the Division TOC, but the Brigade had to apprise the Division of the request.[12/] After either diverting a sortie or requesting a scramble, III DASC communicated the pertinent information to the Division TACP, which gave it to the FAC.[13/] III DASC also notified PARIS, the Control and Reporting Center (CRC) for III Corps. Once CRC had been notified of the aircraft call sign and its ETA in III Corps, in essence III DASC was out of the control process. Only if the FAC and strike sortie did not rendezvous, or if the strike sortie crew did not communicate with PARIS CRC, would III DASC reenter the control picture.

III DASC had no direct contact with the strike aircraft, but did have the capability, if needed, to monitor the strike, through PARIS CRC and the TACP.[14/]

Once the FAC received the call sign and ordnance load of the strike sortie, he called the ground forces commander for coordination. The procedure was the same for ARVN or II FFV units from this point on. Before ordnance could be delivered, there were several tasks that had to be accomplished. First of all, the FAC had to be in the area. If an airstrike were in progress, the new strike sortie crew had to wait until it was completed. The manner of disengaging friendly troops in a close combat situation was contingent upon the type of ordnance being delivered. After disengagement, the FAC had to identify and mark, or have the ground forces commander identify and mark, the positions of the friendly forces. As the strike sortie pilots came up on the target, the FAC briefed them on the ground situation. If artillery or helicopter gunships were being used, the FAC coordinated the lifting of their fire. The FAC then marked the target.[15/] The strike aircraft delivered their ordnance on the target as directed by the FAC. Once the strike aircraft pilots contacted the FAC, he had complete control over them.* He told them where to place their ordnance, sometimes interrupting their runs to assess the effectiveness of the attack. After the strike sortie had expended its ordnance, the FAC gave the

*As always, the fighter aircraft commander retained final responsibility for flying safety; if he noted that a run-in heading could be hazardous to himself or friendly ground forces, or that a given tactic could be nonproductive or dangerous, it was incumbent upon him to notify the FAC and decline to execute such tactics.

pilots a Bomb Damage Assessment (BDA) and released them back to PARIS CRC for recovery.[16/]

In summary, the ground forces commander, at the level where hostilities occurred, requested the IAS/TIC. The request went to the Sector/Brigade TOC/TACP for approval. After approval at Sector/Brigade TOC/TACP, the request was normally submitted directly to III DASC. Division/Province TOC/TACP monitored the request net and initiated disapproval within five minutes or tacit approval was implicit. After arrival at III DASC, the Duty Officer/NCO coordinated the request with the II FFV, G-3 air representative, or III Corps TOC. After approval, if no diverts were available, III DASC called TACC and requested a scramble. TACC scrambled the aircraft and passed the call sign and ordnance load to III DASC. III DASC informed the TACP of the situation, and told the CRC the sorties call sign and ETA in the III Corps area. TACP gave the FAC all the necessary information available. After completing the necessary tasks (determining beyond doubt the location of any friendly troops, checking the fuel state of the fighters, ascertaining the specific ordnance to be delivered, and in what order, etc.), the FAC directed the strike, accomplished the BDA and released the mission to Return to Base (RTB).

It could be a highly complex procedure, involving many communications links, several layers of coordination, and the exacting task of executing ordnance-delivery in close support of friendly troops; yet an axiom in III Corps was that diverts averaged 20 minutes to time over target (TOT) and scrambles averaged 40 minutes. This rule of thumb was used by ground commanders on occasion to determine the degree of criticality of the contact; i.e., whether to press the

engagement and call for immediate air, or to attempt to disengage, or whether immediate tactical air support were necessary. While the "rule" may have been a handy one, it appeared overly optimistic in the face of data retrieved from the DASC data base, and yet it was quite likely over-long compared to the quoted reports of ALOs, FACs, and ground commanders in the field. These apparent anomalies are amplified in Chapter VII.[17/]

Regardless of whether the 20/40 figure was a cliche or a convenience, numerous and direct reports from the field indicated very few complaints about the responsiveness of tactical air. This was a significant compliment to the dedication and professionalism of III DASC personnel, and to all echelons of the Tactical Air Control System in South Vietnam.

CHAPTER III

EARLY HISTORY

Period of 1 Jul - 31 Dec 65

The swift buildup of USAF forces in the latter half of 1965 increased by 400 percent the USAF strength in RVN. The availability of data documenting the III DASC area of responsibility is sketchy for these six months. Only an overall picture dealing with the four different Corps areas is available. The increase in the tempo of USAF operations in RVN during 1965 was the direct result of VC/NVN escalation of the war and the U.S. reaction to that escalation. The year 1965 represented the largest employment of U.S. airpower since the Korean conflict. At the close of 1965, the Commander, 2d Air Division (Comdr, 2AD) announced that USAF had flown 48,510 strike sorties in RVN during 1965, an average of slightly more than 4,000 strike sorties per month.[1/]

The air posture in RVN was in a state of flux throughout the last half of 1965.[2/] The TACS in RVN was put to a severe test. The TACS basically involved a TACC at Tan Son Nhut Air Base tied in with DASCs at each of the four Corps headquarters in RVN. These DASCs had the capability to direct tactical aircraft on targets, using FACs to mark the target.[3/] In III DASC, the 19th Tactical Air Support Squadron (TASS) at Bien Hoa AB, RVN, had 30 O-1E/F aircraft. Its mission was to provide ALOs and FACs for III Corps.[4/]

During July 1965, USAF sorties in all of RVN increased by 2,200. Missions controlled by FACs doubled those flown in June. Air activity rose to a new high in July, with nearly 11,000 combat sorties flown.[5/] One significant

IAS/TIC occurred in northern III Corps on 20 July 1965. The Bu Dop Special Forces Camp in the northern Phuoc Long Province, III Corps, was attacked by an estimated two battalions of VC. The initial attack was at 0105 hours; by 0152 hours, flare ships and tactical fighters were sent to aid the beleaguered outpost. The time from first shell on Bu Dop until flares were dropped and the strike sorties arrived was 47 minutes. From 0152 to 0650 hours, 26 strike sorties were flown in support of the Special Forces Camp. From 0650 to 1700 hours, 47 tactical fighters--9 VNAF A-1Es, 8 USAF A-1Es and 30 USAF F-100s battered the retreating VC forces. The effective and quick air support provided under the direction of III DASC was a major element in the failure of the VC attack.[6/]

Strike sorties in August 1965 showed a ten-fold increase over those in August 1964. USAF aircraft made 3,784 strike sorties or an average of 122 strike sorties per day.[7/] In September 1965, USAF strike sorties totaled 3,861.[8/] One significant operation occurred in which tactical airpower played an important role. Operation GIBRALTAR, near An Khe, Binh Dinh Province, II Corps, was supported by USAF tactical fighters on an immediate basis for a three-day period during 18-20 September 1965. Throughout this period, more than 100 sorties were flown in support of troops in contact.[9/]

In October 1965, USAF tactical fighter sorties increased to 4,297. The battle of Plei Me proved there was no substitute for tactical fighter support under the direction and control of TACC, through the DASC system. It provided timely and massive delivery of ordnance to pinpoint locations for support of troops in combat.[10/]

By November 1965, there were eight tactical fighter squadrons in RVN.[11/] Tactical fighter sorties in RVN had risen to 5,234; this was an increase of 50 sorties per day since August 1965.[12/] III DASC's control of tactical air was decisive in the successful completion of two operations in its area of responsibility. During Operation HUMP, conducted in War Zone D, in northern III Corps, friendly ground forces were supported by 117 USAF tactical air sorties. Operation ROADRUNNER and its successor--BUSHMASTER--were conducted near Ben Cat, Binh Duong Province in III Corps. Highly successful strike sorties were flown by USAF against Viet Cong troops and installations.[13/]

By the end of 1965, there were nine tactical fighter squadrons in RVN.[14/] USAF tactical fighter sorties had risen to 5,380 per month, an average of just slightly over 173 sorties per day.[15/] Almost 70,000 strike sorties were flown in the last half of 1965. USAF tactical fighters flew nearly 25,000 or slightly more than one-third of all sorties flown.[16/] Considering the situation in which this occurred--a rapid buildup of men, equipment, and bases in a short period of time--the response of TACS, especially through its DASCs, proved the system was responsive to expansion and resilient enough to stand the stress of accelerated operations.

CHAPTER IV

REFINEMENT AND IMPROVEMENT

Period of 1966

As 1966 opened, there was a reduction in USAF tactical airstrikes: January 1966 had 1,200 less sorties than December 1965. Tactical air support was down by 20 percent.[1] A total of 4,205 strike sorties were flown by USAF tactical fighters in January 1966.[2]

While the number of strike sorties in February rose to 4,485,[3] an increase of 280 sorties over January, more important to the future role of III DASC in RVN were decisions made by the Commander in Chief, Pacific Command (CINCPAC). As a result of these decisions, strike sorties for 1966 were to be allocated on a basis of 150 sorties per month per US/FWMA Forces in-country maneuver battalion. About 7,800 sorties per month would be used to support the Republic of Vietnam Armed Forces (RVNAF). In RVN, USAF would increase its strength to 18 tactical fighter squadrons.[4] In addition, on 15 February 1966, CINCPAC promulgated the Southeast Asia Integrated Tactical Air Control System (SEAITACS). It consisted of four parts: (1) TACC, Tan Son Nhut Air Base; (2) DASCs; (3) ACW elements; and (4) Air Traffic Control Elements.[5]

The pitfalls of using an average number of sorties per month for analysis was demonstrated by the statistics for March and April 1966. The average for these two months was 4,700 strike sorties. In actuality, March sorties totaled 6,027, while the total for April was 2,647 less.[6] The April sortie rate was the lowest number of in-country sorties flown since September 1965.[7]

In May, there were 4,251 sorties, an increase of almost 1,000 sorties over April.[8] In III Corps, during the months of June-July 1966, the 1st Infantry Division (U.S.) operated on a search and destroy mission in War Zone C--Operation EL PASO. USAF support of this operation was decisive. The CG, 1st Inf Div (U.S.), while discussing an engagement that occurred on 30 June 1966 stated: "U.S. forces nearly lost this battle. However, air superiority proved to be the deciding factor and inflicted severe losses on the enemy."[9] Total USAF strike sorties flown in June were 5,230, an increase for the second straight month of almost 1,000 strike sorties.[10]

Operation EL PASO continued into July 1966. On 9 July 1966, elements of the 1st Inf Div (U.S.) were ambushed by the VC. A total of 99 IAS/TICs was used in a coordinated air-artillery assault on the ambushers. The VC broke and ran under this assault.[11] For the third straight month, the total USAF strike sorties increased by almost 1,000, rising to 6,234 in July.[12] This trend continued into August 1966, when a total of 7,147 strike sorties were flown.[13]

From 14 September 1966 to 26 November 1966, III DASC had a major role in one of the largest operations of the war--Operation ATTLEBORO.[14] It was conducted in the northern portion of Tay Ninh Province, III Corps.

From 4 October 1966 to 1 November 1966, only two IAS/TICs were flown in support of ATTLEBORO. But from 1 November 1966 to 25 November 1966, the tempo greatly increased and 485 IAS/TICs were flown.[15] More than half of these were flown during the period of 3 November 1966 to 8 November 1966. USAF strike sorties flown for the three-month period were: September - 6,777, October - 6,590, and November - 7,448, for a grand total of 20,815.[17]

Of vital importance to this report were III DASC's data logs for October and November 1966. They constituted the only reliable data base upon which any average time for IAS/TIC might be calculated for the period 1 July 1965 until 31 December 1967. Although the sampling for October was small--89 occurrences for III DASC--compared to 6,590, the total number of in-country strike sorties flown that month--they are reliable enough to give an accurate picture of reaction times.[18/]

For the 89 occurrences mentioned, of either scrambles or diverts occurring in III DASC during October 1966, DASC processing time--starting from the DASC's receiving the request until the strike sortie was scrambled/diverted--averaged 10.05 minutes. Average en route time--beginning when the sorties were scrambled/diverted until TOT--was 31.81 minutes. The average time after receiving the request at III DASC until TOT was 41.86 minutes. Of the 89 occurrences, 76 were scrambles. The average processing time at the DASC and the average en route time were 10.50 minutes and 34.27 minutes respectively. The average time for completion of an IAS/TIC, using ground alert aircraft, was 44.77. When divert aircraft were used, however, this time was reduced to 24.84 minutes. The difference in DASC's processing time was 3.04 minutes. This time can be charged to the requirement for scrambles to go through TACC. Diverted aircraft almost divided the en route time in half, saving 16.89 minutes. Accordingly, for October 1966, response times were averaged in these increments:

	DIVERTS	SCRAMBLES
III DASC Processing	7.46	7.46
TACC Processing	--	3.04

	DIVERTS	SCRAMBLES
Ground Alert Response Time	--	16.89
Average En Route Time	17.38	17.38

Recognizing that DASC processing and en route times would vary, it still seemed reasonable, other factors being equal, to assign a delay factor to the TACC and air base.[19] Analysis of data listed here upheld the theory of III DASC for response times: 20 minutes for a divert, 40 minutes for a scramble. Comments from ground forces commanders also reflected their belief that III DASC "gets the air there, when and where it is needed."

Operation ATTLEBORO continued through most of November 1966. In compiling response times for IAS/TIC from the November 1966 logs of III DASC, several qualifications were used. Any total time for a divert/scramble strike sortie of more than one hour was eliminated. No air cover missions were included. Every effort was made to refine the data so as to show, as clearly as possible, real reaction time. It was evident from the raw data that different meanings had been assigned by different people to such times as DASC processing time, scramble/divert time, en route time, and time over target. DASC processing time for November 1966 was interpreted as beginning when DASC received the request, until the aircraft was diverted or scrambled. En route time was the difference between scramble/divert time and TOT, including processing time at the scramble base. From available data, 113 occurrences were totaled.[20]

For November 1966, the average time required after receiving a request at III DASC until TOT was 31.28 minutes, with a processing time of 8.18 minutes,

and an en route time of 23.10 minutes. Diverted sorties averaged 6.86 minutes for DASC processing, while scrambled sorties required 8.63 minutes. It appears, therefore, the average TACC processing time for November was 1.77 minutes. Scrambled sorties had an en route time of 26.94 minutes, as compared with 12 minutes for diverted sorties. Thus, an average of 14.94 minutes could be assigned to the alert and scramble segment of IAS/TIC. For November 1966, the average total time for the diverted sorties from receiving the request until TOT was 18.86 minutes--a saving of 16.71 minutes over scrambled sorties.[21/]

The year 1966 closed with 7,582 strike sorties in December. During 1966, a monthly average of 5,891 strike sorties were flown against enemy targets in RVN.[22/] Each month an average of 1,563 sorties was utilized for CAS for TIC. USAF conducted one-third of the total volume of all tactical air sorties flown in RVN.[23/]

CHAPTER V

ON-GOING SUCCESS

Period of 1967

Statistics for 1967 were meager. Only a cursory account can be given of air activity in III Corps, as part of the total air war picture in RVN. During the first six months, 54,488 sorties were flown throughout RVN, with an average of 9,081 per month. Of the total flown, 38,552 sorties were for close air support.[1] From 1 July - 31 December 1967, 62,211 strike sorties were flown; the average monthly sortie rate was 10,368.5.[2]

Operation JUNCTION CITY occurred in III Corps between 22 February and 14 May 1967. This operation was conducted in War Zone C, a major VC base since the French Indo-China war. During the operation, as many as 77 IAS/TICs were flown in support of a single engagement. On 22 and 28 February 1967, a total of 21 and 45 IAS/TICs, respectively, were flown in support of JUNCTION CITY I. When this operation terminated on 15 March 1967, 433 IAS/TICs had been flown in its support. On 20-21 March 1967, JUNCTION CITY II received massive USAF tactical fighter support. In a battle around Bau Bang on 20 March, 19 USAF aircraft responded to IAS/TIC. Eighteen miles NE of Tay Ninh City on 21 March, five FAC sorties directed 31 scrambled and diverted aircraft. On 31 March 1967, 77 USAF aircraft were scrambled or diverted in support of friendly forces around Ap Gup. When Operation JUNCTION CITY terminated on 14 May 1967, 5,002 tactical airstrike sorties had been flown in its support.[3]

Although definitive data were insufficient, some material was found which

appears to be the basis for planning responses to IAS/TIC in III Corps. All user units in III Corps Tactical Zone received a letter from III DASC ALO, Lt. Col. Jack E. White, which set forth response times as the average for III DASC in 1967. It required 7 minutes to process a request at III DASC, and approximately 10 minutes to launch an aircraft from the ground alert pad. A maximum en route time of 15 minutes from anywhere in RVN was established. As for diverts, the average processing time was 5 minutes with 10 minutes en route time. Although the times given were 15 minutes for diverts and 30 minutes for scrambles, they compare favorably with the response times computed directly from the October-November 1966 III DASC mission logs.[4/]

CHAPTER VI

REQUEST AND RESPONSE NETWORK

"There is an insoluble bond rightly formed between the lone, small forces on the ground and the lone Guardian Angel in the sky that is not supplanted by anything else, day or night." 1/

Period of 1968

Close support of ground operations by USAF/VNAF tactical strike aircraft in III Corps during 1968 was of such magnitude, it can best be displayed statistically. While statistics may be used to measure magnitude, the overall contribution of III DASC must be seen in general terms in its relation to the success of ground operations in III Corps.

On 31 January 1968, the TET Offensive began in III CTZ; however, its resultant operations and activities have already been recorded in various CHECO reports. Instead, this chapter analyzes the different segments of the request and response network involved in an IAS/TIC. The statistical data are not without faults, the most glaring one being the time charged to En Route Time (ET) in the response phase. The reported times seemed to be so excessive, considering the aircraft involved and area concerned, that they brought into question the entire reporting system used in 1968. With this point in mind, the different segments of the request response network for IAS/TIC were examined.

The first segment of the network concerned the time required by a ground commander to make the decision to request an IAS/TIC. Since this time was subject to many variables, a meaningful average could not be determined. 2/

AVERAGE RESPONSE TIMES 1968

DIVERTS

MO	DSDT	GT	ET	TDT	TT
JAN	4.98	None	39.95	6.06	50.99
FEB	4.12	None	40.33	2.93	47.38
MAR	4.47	None	33.70	5.18	43.35
APR	5.39	None	42.32	8.07	55.78
MAY	STATISTICS NOT AVAILABLE				
JUN	6.67	None	38.73	6.12	51.52
JUL	4.40	None	37.67	4.64	46.67
AUG	10.96	None	30.72	6.63	48.31
SEP	9.83	None	29.22	6.39	45.44
OCT	6.27	None	27.14	5.34	38.75
NOV	3.60	None	37.12	5.66	46.38
DEC	2.85	None	24.45	6.78	34.08
AVER.	5.77	None	34.67	5.80	46.24

SCRAMBLES

MO	DSDT	GT	ET	TDT	TT
J - M	NOT REPORTED AS A SEPARATE ITEM				
APR	5.01	29.30	4.96	15.96	55.23
MAY	STATISTICS NOT AVAILABLE				
JUN	4.07	11.40	22.62	8.59	46.68
JUL	7.72	16.23	21.79	10.52	56.26
AUG	5.86	15.37	22.39	13.31	56.93
SEP	4.84	17.19	24.82	10.31	57.16
OCT	2.55	14.86	24.67	12.32	54.40
NOV	5.73	15.94	19.57	17.98	59.22
DEC	4.02	15.47	20.45	9.41	49.35
AVER.	4.97	16.97	20.16	12.30	54.40

FIGURE 5

Neither was it possible to ascertain the time it took to process the request at the TOC/TACP, since it was not reported. The only segments of the network which could be analyzed were those occurring after the request was received at the DASC. DASC Decision Time (DSDT) included four variables: (1) Divert Decision Time for FWF; (2) Divert Decision Time for ARVN; (3) Scramble Decision Time for FWF; and (4) Scramble Decision Time for ARVN.[3/]

A DASC had divert authority, but a scramble had to be ordered by the Tactical Air Control Center. Yet, the DSDT for diverts was almost one minute longer on the yearly average. A close examination of the monthly averages, however, revealed the DSDT for diverts in August and September--months of heavy fighting--was almost double the norm. (Fig. 5; App. II.) DASC Decision Time for these two months was very likely lengthened by the desire to deliver the right ordnance on the target.[4/]

Regarding the difference between ARVN diverts and FWF divert requests in the DSDT, except for September, the time differential did not support the claim that ARVN approval added five minutes to the DSDT. In fact, ARVN approval for diverts was .63 of a minute less than the time required to approve a FWF divert request.[5/] (Fig. 6.) The longer time needed for ARVN approval for scrambles shows up dramatically: from two to five minutes longer were required than for FWF requests, with an average of 1.35 minutes.[6/] (Fig. 6.)

Average Ground Time (GT) pertained only to scrambles. The average for

the reported months in 1968 was 16.97 minutes, with a high of 29.30 minutes in April and a low of 11.40 minutes in June. There was no appreciable difference between USAF and VNAF times for GT.[7/]

The most controversial response time segment was En Route Time (ET). It would seem logical that an airborne tactical fighter en route to a preplanned target in III CTZ would reach a divert rendezvous in less time than a scrambled bird. Yet the reported statistics indicated it took a diverted sortie more than 14 minutes longer to reach a point where it was ready to attack.[8/] As related in Chapter II, 34 percent of III DASC's air came from Phan Rang. These sorties constituted the majority of the preplanned missions in III Corps. Bien Hoa AB supplied 33 percent of the air for III DASC and the majority of its scrambles. This locational factor may have been responsible for the longer times, but it would have been necessary for the divert decision to have been made during or soon after the takeoff roll of the sortie from Phan Rang.[9/] The method of reporting En Route Time did not appear to be very accurate and the available data on En Route Time was so misleading as to be dangerous. It was the one segment of the request response network which did not correspond to the times accepted as the axiom in III DASC. In Chapter IV, the actual mission logs were used to compute the response times. The resulting figures were more in keeping with expected times.[10/] (Fig. 6.)

The Target Delay Time (TD) began when the FAC and strike aircraft had completed all their required tasks and were ready to deliver the ordnance.[11/] For diverts, the TDT was less than half the scramble TDT.[12/] Contact during the scrambled sorties apparently was heavier and closer and required a longer

DIFFERENCES IN DASC DECISION TIMES FWF AND ARVN IAS/TIC REQUESTS IN MINUTES

DIVERTS

MO	FWF	ARVN	DIFFERENCE
JAN	4.37	5.19	+ .82
FEB	3.49	4.75	+ 1.26
MAR	4.68	4.32	- .36
APR	7.12	3.67	- 3.45
MAY*			
JUN	10.66	4.58	- 6.08
JUL	4.08	4.57	+ .49
AUG	11.17	10.75	- .42
SEP	6.16	13.50	+ 7.34
OCT	8.57	5.12	- 3.47
NOV	3.76	3.43	- .33
DEC	4.72	1.92	- 2.80
AVER.	6.25	5.62	- .63

SCRAMBLES

MO	FWF	ARVN	DIFFERENCE
JAN*			
FEB*			
MAR*			
APR	4.61	5.41	+ .80
MAY	N O T R E P O R T E D		
JUN	4.19	3.96	- .23
JUL	9.14	6.30	- 2.84
AUG	4.13	7.60	+ 3.47
SEP	3.96	6.55	+ 2.49
OCT	2.55	0.00	0.00**
NOV	3.29	6.96	+ 3.67
DEC	3.36	5.34	+ 1.98
AVER.	4.67	6.02	+ 1.35

* Not Reported.

** Not included in average.

FIGURE 6

time for the ground forces commander to disengage his troops and mark his positions. This time differential might also have meant the scrambled sorties were stacked over the target awaiting their turn to expend ordnance. Still another possibility was that diverted sorties would normally have less time remaining prior to RTB.

The Total Times (TT) recorded for 1968 appear erroneous, because the reporting system did not allow enough segment discrimination. Diverts averaged 46.24 minutes and scrambles 54.40 minutes. If the average En Route Times for diverts--34.67 minutes--were divided in half, more acceptable times would have occurred. En Route Time should have included only the portion of the flight from takeoff or divert decision until rendezvous time. Rendezvous time should have encompassed the necessary "coming together" of FAC and sortie. Briefing time also was not differentiated.

CHAPTER VII

CONCLUSIONS

The timeliness of tactical fighters in response to requests for immediate close air support from Army ground commanders in a combat situation had long been a subject of continuing study and emphasis in Southeast Asia. As a result of the keen interest in this area, the DASC recording of response times was given special scrutiny.[1/]

From empirical study of the Tactical Air Control System, it appeared that the DASC/TACC procedures themselves, for diverts and scrambles, worked as efficiently as was humanly possible. The U.S. Army and ARVN units in the field, as well as the Special Forces and CIDG units, praised the close air support they received in report after report, such as those following the Siege at Plei Me, Operations ATTLEBORO, EL PASO, and JUNCTION CITY, and the Battle of Duc Lap. These did not even include countless small unit After Action Reports which amply documented the responsiveness and effectiveness of tactical airpower in South Vietnam.[2/]

In fact, it was difficult to reconcile the laudatory remarks that actual users attributed to tactical air response with the figures available within Seventh Air Force itself. The reporting system used in 7AF from 1965 through 1968 did not accurately reflect airstrike response to requests for immediate air support. This came about from the reporting procedures which, within the automated data base, did not always permit the necessary discrimination of the differing elements of response, many of which were unfairly designated as

Air Force delays.[3]

A Project CHECO Report, "Air Response to Immediate Air Requests in SVN" completed in April 1969, noted the difference between the observed response times and those reported by the data system. (Many of the conclusions presented in the CHECO Report had been independently arrived at in AFGOA Report 67-7, Tactical Air Support Analysis Team, and AFGOA Memorandum 68-4, FACOPS.) Following submission of the report, a task force headed by the Chief of TACC's Current Operations probed both aspects of response--how to improve it, and how to improve the reporting of it. The task force was composed of personnel from Headquarters, 7AF Tactical Air Control Center, Tactical Analysis (DOA) and Automated Data Systems (DOS). At the same time, PACAF personnel were examining the system in an effort to improve it. The same deficiencies had been noted by that Headquarters and correspondence had been initiated with 7AF relative to improving the system.[4]

The task force and PACAF agreed the reporting system, as it stood, was supplying inadequate and improper data, and that the problems primarily centered around the following areas:[5]

- COMBAT SKYSPOT, CAP, Follow-on and TOT (specified target time) missions had been coded as "immediates", introducing long delays which improperly biased the average response times.
- Holding delays caused by ground elements, and G-3 Air decision delays, both were included in Air Force-charged response times.
- Airborne preplanned sorties diverted (inter-division) for immediate requests, with excellent response times on the order of 7 to 8 minutes, were not included in the data base because there was no necessity for TOC/TACP to contact the DASC, and therefore no opportunity to enter the information on the Form 349, the DASC reporting form.

The findings indicated a need to determine what the actual TACS response times (especially for immediate requests for troops in contact) were, and what changes in the present reporting system were in order. For the first item, an immediate program was set up by TACC to collect and manually compile response data on operations within a representative area. For this, the 3d Tactical Fighter Wing at Bien Hoa AB, operating in III DASC, was selected. The study recorded all 3d TFW diverts and the processing procedures of III DASC from 13 May 1969 to 1 June 1969, and was highly illuminating. As can be seen in Figure 7, scrambles within III Corps averaged 39.5 minutes before initial delivery of ordnance. This total would have been unquestioned under the previous definitions, and would be erroneously recorded as "Air Force response time". However, by eliminating such time increments as G-3 Air Decision Time, ground initiated delays to clarify the battle situation, times required to lift artillery fire or clear helicopters from the strike area, the average response time actually chargeable to the Air Force was 26.4 minutes. This was in marked contrast to quantitative data extracted from the DASC data base, but agreed remarkably to that empirically computed by ALOs, FACs and even ground commanders.[6]

The manual reporting system confirmed and identified the errors being made in the reporting system, and as an interim measure, was instituted throughout South Vietnam on 1 June 1969. In the meantime, Hq 7AF and Hq PACAF coordinated the suggested changes which hopefully would result in a valid DASC data base through the Automated Data System. Preliminary information from PACAF indicated the requested changes had been approved and were tentatively scheduled for implementation on 1 September 1969. In actuality, a team from PACAF arrived in early September, sent orientation teams to thoroughly brief all who were to be

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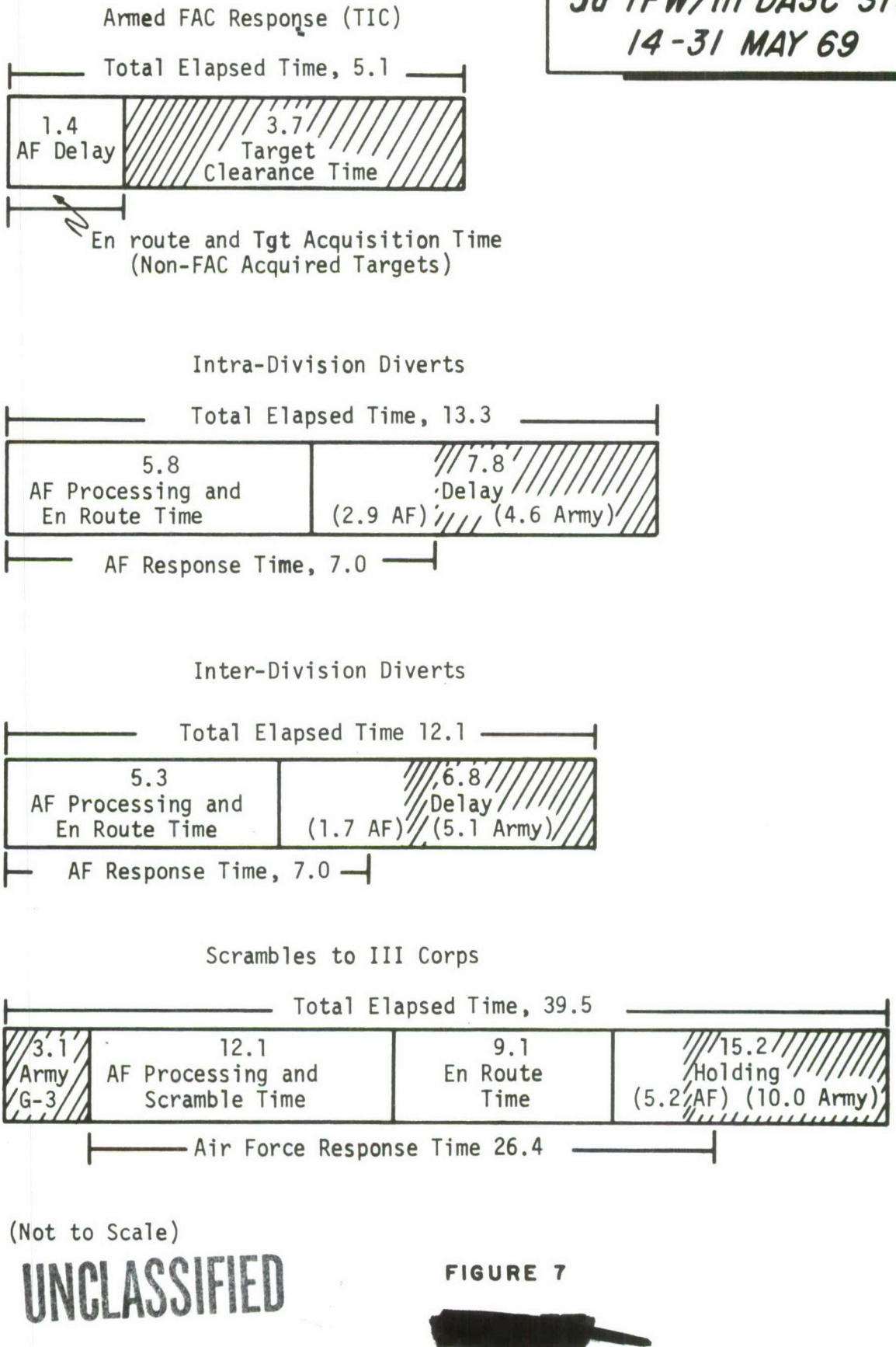
3d TFW/III DASC STUDY
14-31 MAY 69



(Not to Scale)

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FIGURE 7

[redacted]

involved in the reporting procedures, and put the system into effect on 15 September.[7]

Among the necessary major changes was the capability to discriminate between time-sensitive and non time-sensitive targets. A "fording site", "suspected enemy location", or "infiltration route" would be non time-sensitive, as would targets for which TOT had been predetermined, follow-on flights dispatched, or combat air patrol (cover) has been established, even though the source of the strike aircraft came from a divert or a scramble pad.[8]

Another requirement of the new system would be the ability to identify those ground initiated delays previously charged to the Air Force. This would be the case if the strike aircraft arrived and made rendezvous with the FAC, but the ground commander required more time to sort out the battle situation, which was usually the case, and especially if the response were rapid. The same applied to organic (artillery or mortar) fire and to gunships in the strike area; henceforth these delays were not to be charged to the Air Force or to the Tactical Air Control System.[9]

A third and significant change was to discontinue the multiple logging of simultaneous en route times (as well as to stop logging follow-ons) as immediates. Previously, if two missions were scrambled or diverted to a TIC situation, the entire time period for each, from request through ordnance on target was often logged as response time, even though the second flight might have to hold off target for as long as 20 minutes while the first mission was directed on the strike. Inasmuch as the second flight was "ready" and overhead, but could not expend until the first flight was off target, this time should not

have been charged as a TACS delay, but often was. The change in the reporting system would identify the second flight's response time only as that time after the first flight had left the target.[10/]

Finally, in the previous reporting system, the best response times of all were never recorded in the data base. These concerned preplanned missions which were already in, or en route to a specific Area of Operations when diverted. As long as they remained in the same AO, there was no requirement that the DASC be notified; therefore, although these diverts could well be within a time span of five to ten minutes, they never entered the reporting system although qualifying as diverts in all respects.[11/]

In a concurrent effort to improve not only the reporting of response, but the response itself, an armed FAC evaluation nicknamed Misty Bronco was conducted in III Corps, using the OV-10A aircraft. The TACP supporting the 2d Brigade, 25th Infantry Division (U.S.), at Cu Chi, RVN, was selected for the evaluation, which began on 4 April 1969 and continued through 13 June 1969. The success of the armed OV-10 as a highly responsive (if firepower-limited) airstrike capability was quickly apparent, and even before the evaluation was completed, the Commander, Seventh Air Force, directed on 5 June that all in-country USAF OV-10s assume the same role.[12/]

The primary mission of the OV-10 remained that of a FAC; i.e., strike control, visual reconnaissance, artillery adjustment, and escort. However, carrying armament, the Brigade FAC could also provide rapid support to troops in contact or against fleeting targets until tactical air or other additional

fire support could arrive. The intent was not that the OV-10 FAC should supplant tactical airpower in any way, only that he be able to provide interim support until heavier ordnance could be provided. In actuality, during the period of the III Corps evaluation, the armed FAC was available for immediate support of 32 troops-in-contact situations, and expended ordnance on 25 of these occasions; in seven instances the FAC provided sufficient firepower that tactical airstrikes or organic fire support was not necessary. The demonstration of this rapid response to requests for support of TIC was impressive; the average FAC response time from the ground commander's request until expenditure of ordnance was 5.1 minutes. Of this, 3.7 minutes was accountable as delay while waiting ground clearance to fire. Against all targets (TIC, fleeting, FAC acquired, etc.) upon which the FACs expended, the average response time was 7.3 minutes, of which 5.7 minutes was that delay required to obtain clearance.[13/]

In its armed configuration, the OV-10A carried four M-60C machine guns with 2,000 rounds of 7.62-mm ammunition, two LAU-59 pods carrying 14 2.75" White phosphorus marking rockets and another two LAU-59 pods with 14 HE (high explosive) rockets. With this limited ordnance, generally no expenditure was authorized unless other supporting fire (artillery, helicopter gunships or tactical air) was not available, and where ordnance delivery was authorized it was restricted to a minimum recovery altitude of 1,500 feet. At no time were duels with AAA sites permitted.[14/]

The two basic actions, reconfiguring the reporting system to give more validity to the DASC Data Base, and arming of the OV-10A FAC aircraft to provide

limited but highly responsive interim firepower for the ground commander, comprised two highly significant steps forward in the area of response time to immediate requests.

FOOTNOTES

CHAPTER I

1. (U) 7AFP 55-1, Hq 7AF, 20 Mar 68, pg 14.

2. (U) Ibid, pg 29.

3. (U) Map, RVN, Administrative Districts, and Military Regions, 1968. (Hereafter cited: Map, RVN.)

4. (S) CHECO Rprt, Hq PACAF, DOTEC, "The Defense of Saigon," 14 Dec 68, Chap VII, pp 56-64. (Hereafter cited: The Defense of Saigon.)

5. (C) ALO Briefing Chart, III Corps, Jun 69. (Hereafter cited: ALO Briefing Chart.)

6. (C) Rprt, ARVN Abn Div, TACP, Organization and Operation, 2 Jul 68.

7. (C) ALO Briefing Chart;
(U) Map, RVN.

8. (S) CHECO Rprt, Hq PACAF, DOTEC, "USAF Support of Special Forces in SEA," 10 Mar 69.

9. (S) The Defense of Saigon, Chap I, pg 1.

10. (S) Hist Rprt, III DASC, Semiannual, 1 Jan 68 - 30 Jun 68, 1 Aug 68.

11. (C) Briefing, III DASC, 17 Jan 68, pg 1.

12. (S) Msg, COMUSMACV, subj: ROE, 121246Z Dec 68.

13. Ibid.

14. (U) OpOrd 1-69, III DASC, III CTZ, subj: Tactical Air Operations in III CTZ, 10 Apr 69, Annex B,1,d, pg B-1.

15. (C) Briefing, III DASC, Maj Holland, Sr D/O, 18 Jun 69.

CHAPTER II

1. (U) 7AFP 55-1, Hq 7AF, "In-Country Tac Air Ops," 20 Mar 68, pg 27.

2. Ibid, pg 28.

3. Ibid, pg 29.

4. (S) End of Tour Rprt, Maj Gen Gordon Graham, 15 Jul 66 - 31 Jul 67, pg B-2.

5. (U) Memo 68-4, AFGOA, FAC Operation, Jul-Aug 68, Dec 68.

6. (C) Interview with Major Ritchie, Dep ALO, III Corps, 18 Jun 69;
(U) Ltr, III Corps ALO, subj: CAS in III CTZ, 10 Aug 67.

7. (C) Interview with Capt A. Butler, III DASC D/O, 18 Jun 69.

8. (C) Memo 68-4, AFGOA, FAC Operations, Jul-Aug 68, Dec 68.

9. (C) Interview with Maj Holland, Sr D/O, III DASC, 18 Jun 69;
(C) Interview with Capt A. Butler, III DASC D/O, 18 Jun 69.

10. (C) Interview with SSgt Harrison M. Smith, NCOIC, III DASC, 18 Jun 69.

11. (C) Interview with Major Holland, Sr D/O, III DASC, 18 Jun 69.

12. (C) Interview with Capt Meyer, USA G-3 Air Representative, II FFV at III DASC, 18 Jun 69.

13. (C) Interview with Major Holland, Sr D/O, III DASC, 18 Jun 69.

14. (C) Ibid.

15. (C) AFGOA Report 67-7, Tactical Air Support in SVN, Oct, Nov 66.

16. (C) Interview with Major Yates CMC ALO/FAC, 19 Jun 69.

17. (S) CHECO Rprt, Hq PACAF, DOTEC, "Response to Immediate Requests for Tac Airstrikes".

CHAPTER III

1. (TS) MACV Command Hist Rprt, 1965, pg 187. (Extract is SECRET.)

2. (S) Hist Rprt, 2AD, Jul-Dec 1965, Vol 1, pg 7.

3. (S) Ibid, Vol 1, pg 5.

4. (S) Ibid, Vol 1, pp 7-8.

5. (TS) MACV Command History Rprt, 1965, pg 185. (Extract is SECRET.)

6. (S) Hist Rprt, 2AD, Jul-Dec 1965, Vol 11, pp 16-17.

7. Ibid, pg 23.

8. Ibid, pg 26.
9. (TS) MACV Command Hist Rprt, pg 167. (Extract is SECRET.)
10. (S) Hist Rprt, 2AD, Vol 11, Jul-Dec 1965, pg 37.
11. Ibid, pp 61-62.
12. Ibid, pg 38.
13. (TS) MACV Command Hist Rprt, pg 171-172. (Extract is SECRET.)
14. (S) Hist Rprt, 2AD, pg 62.
15. (S) Ibid, pg 44.
16. Ibid, pg 62;
(S) Research of 7AF Files.

CHAPTER IV

1. (TS) MACV CMD Hist Rprt, 1966, pg 391. (Extract is SECRET.)
2. (S) 7AF Hist Rprt, 1 Jan 66-30 Jun 67, pg 344.
3. Ibid.
4. (TS) MACV Cmd Hist Rprt, 1966, pg 127. (Extract is SECRET.)
5. Ibid, pp 311-312.
6. (S) 7AF History Rprt, 1 Jan 1966-30 Jun 1967, pp 344-46.
7. (TS) MACV Cmd Hist Rprt, 1966, pg 394. (Extract is SECRET.)
8. (S) 7AF Hist Rprt, 1 Jan 1966-30 Jun 1967, pg 346.
9. (TS) MACV Cmd Hist Rprt, 1966, pg 385. (Extract is SECRET.)
10. (S) 7AF Hist Rprt, 1 Jan 66-31 Jun 67, pg 346.
11. (TS) MACV Cmd Hist Rprt, 1966, pg 386. (Extract is SECRET.)
12. (S) 7AF Hist Rprt, 1 Jan 66-31 Jun 67, pg 348.
13. (S) Ibid.
14. (S) CHECO Rprt, Hq PACAF, DOTEC, "Operation ATTLEBORO," 14 Apr 67. (Hereafter cited: Operation ATTLEBORO.);

(TS) MACV Cmd Hist Rprt, 1 Jan 66-31 Jun 67, pg 387. (Extract is SECRET.)

15. (S) 7AF Hist Rprt, 1 Jan 66-30 Jun 67, pp 20-22.

16. (S) Operation ATTLEBORO, pp 45-46.

17. (S) 7AF Hist Rprt, 1 Jan 66-30 Jun 67, pp 348-350.

18. (S) Statistical Data, II DASC Mission Logs, CHECO Microfilm, S-21; S-22, Oct 66.

19. Ibid.

20. (S) Statistical Data, III DASC Mission Logs, CHECO Microfilm, S-23; S-25.

21. (S) Ibid;
(S) Operation ATTLEBORO.

22. (S) 7AF Hist Rprt, 1 Jan 66-30 Jun 67, pp 11, 350.

23. (TS) MACV Cmd Hist Rprt, 1966, pg 391. (Extract is SECRET.)

CHAPTER V

1. (S) 7AF Hist Rprt, 1 Jan 66-30 Jun 67, pg 11.

2. (S) 7AF Hist Rprt, 1 Jul 67-31 Dec 67, Vol 1, pg 3.

3. (S) 7AF Hist Rprt, 1 Jan 66-30 Jun 67, pp 23-29;
(C) CHECO Rprt, Hq PACAF, DOTEC, Operation JUNCTION CITY, 17 Nov 67. (Hereafter cited: Operation JUNCTION CITY.)

4. (U) Ltr, III Corps ALO, subj: CAS in III CTZ, 10 Aug 67, pg 4.

CHAPTER VI

1. (TS) MACV Cmd Hist Rprt, 1968, pg 403. (Extract is SECRET.)

2. (C) Interview with Capt Meyer, G-3 Air Representative at III DASC.

3. (C) Research of III DASC Files, Jul 69.

4. Ibid.

5. Ibid.

6. Ibid.

7. Ibid.

8. Ibid.

9. (C) Briefing, Major Holland, Senior Duty Advisor, III DASC, 18 Jun 69.

10. See Documentation for Chap IV.

11. See Documentation for Chap II.

12. (C) Research of III DASC Files, Jul 69.

CHAPTER VII

1. (C) Rprt, 7AF DCS/Operations, subj: Evaluation of the Adequacy and Timeliness of Immediate Close Air Support, Jun 69. (Hereafter cited: 7AF DCS/Ops Evaluation.)

2. (C) Interview with Col Evan W. Rosencrans, Chief, TACP, Hq 7AF, by CHECO Personnel, 7AF, 26 Aug 69;
(S) Operation ATTLEBORO;
(C) Operation JUNCTION CITY;
(C) CHECO Rprt, Hq PACAF, DOTEC, "The Siege at Plei Me," 24 Feb 66;
(C) CHECO Rprt, Hq PACAF, DOTEC, "Operation EL PASO," 30 Nov 66;
(C) After Action Rprt, "Duc Lap," undated.

3. Ibid.

4. (C) Ibid;
(S/AFEO) CHECO Rprt, Hq PACAF, DOTEC, "Air Response to Immediate Air Requests in SVN," 15 Jul 69. (Hereafter cited: CHECO Response Rprt.)

5. (C) DCS/Ops Evaluation, 7AF, undated;
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6. (C) Interviews with Col Evan W. Rosencrans;
(C) DCS/Ops Evaluation, 7AF, undated;
(S/AFEO) CHECO Response Rprt.

7. (C) Oral Discussion with Col Evan W. Rosencrans.

8. (S/AFEO) CHECO Response Rprt;
(C) Oral Discussion with TACC Personnel, 1 - 15 Sep 69.

9. Ibid.

10. (S/AFEO) CHECO Response Rprt;
(C) DCS/Ops Evaluation 7AF, undated.

11. Ibid.

12. (C) DCS/Ops Evaluation, 7AF, undated.

13. Ibid.

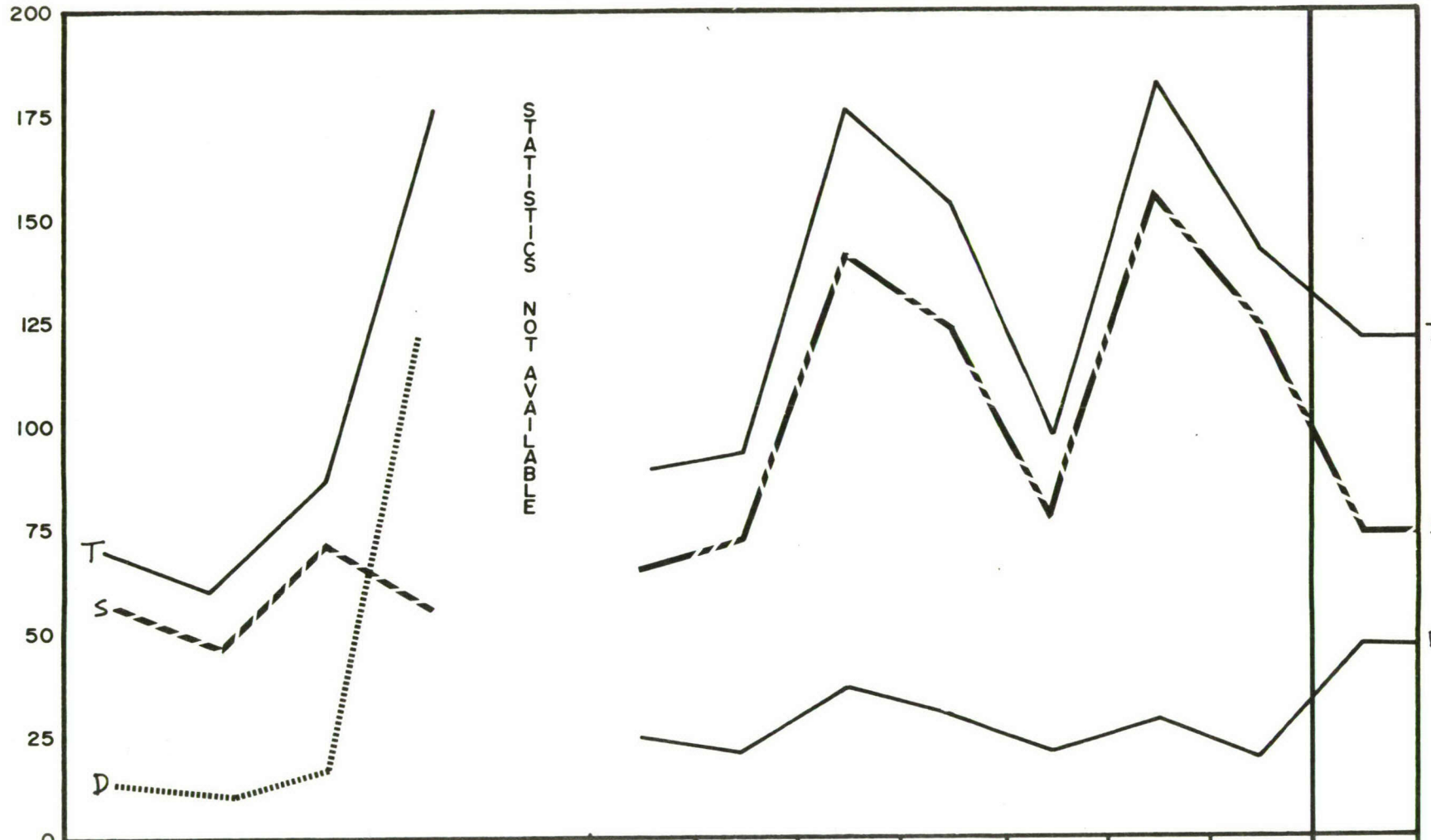
14. Ibid.

APPENDIX I

REQUESTING AND RESPONDING AGENCIES FOR IMMEDIATES, JAN-DEC 1968 III DASC

Month	D/S	REQUEST		RESPONSE		
January	USA 38/0	USAF 0/0	ARVN 31/0	USAF 44/0	RAAF 2/0	VNAF 23/0
February	35/0	0/0	24/0	40/0	0/0	19/0
March	52/0	0/0	35/0	57/0	2/0	28/0
April	86/44	0/0	35/12	83/56	9/0	29/0
May	STATISTICS NOT AVAILABLE			STATISTICS NOT AVAILABLE		
June	9/48	0/0	15/17	15/63	0/0	9/2
July	12/62	0/0	9/10	19/72	0/0	2/0
August	28/119	0/0	8/22	36/141	0/0	0/0
September	24/94	0/0	6/29	30/122	0/0	0/0
October	14/75	0/1	7/0	17/76	0/0	4/0
November	20/141	0/0	8/14	20/154	0/0	8/1
December	11/115	0/0	7/9	15/123	0/0	3/1
Totals	329/698	0/1	185/113	376/807	13/0	125/5

III DASC DIVERTS/SCRAMBLES JAN-DEC 1968



	* JAN	* FEB	* MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVER
DIVERTS	69	59	87	121	N/A	24	21	36	30	21	28	18	46.71
SCRAMBLES	NR	NR	NR	56		65	72	141	123	76	155	124	73.81
TOTALS	69	59	87	177		89	93	177	153	97	183	142	120.52

* ESTIMATED DISTRIBUTION BETWEEN DIVERTS & SCRAMBLES

DATA EXTRACTED FROM SEADAB SEE DOC# 22, dtd 21-22 JUN 69

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APPENDIX III

FAC FLYING ACTIVITIES, II FFV/III CORPS FEB - DEC 1968				
1968	SORTIES		HOURS	
MONTH	TOTAL	AVER	TOTAL	SORTIES AVER
FEB	3,804	28.38	7,195:00	1.89
MAR	4,219	31.72	7,723:00	1.83
APR	3,849	30.30	6,801:30	1.76
MAY	3,913	34.02	6,910:00	1.76
JUN	3,939	32.38	6,815:00	1.73
JUL	4,970	37.08	8,583:60	1.72
AUG	5,182	36.23	8,916:00	1.72
SEP	5,383	39.00	10,801:00	2.01
OCT	5,638	40.27	10,016:80	1.86
NOV	5,187	32.41	9,682.90	1.86
DEC	5,524	34.68	10,393:50	1.88
AVER.	4,691.63	34.17	8,530:73	1.81

SOURCE: Information extracted from 19th TASS Monthly Activities Rprts, Feb-Dec 68.

FACS ASSIGNED II FFV/III CORPS 1968

MONTH		NUMBER
	JAN	NOT REPORTED
	FEB	134
	MAR	133
	APR	127
	MAY	115
	JUN	122
	JUL	134
	AUG	143
	SEP	138
	OCT	140
	NOV	160
	DEC	164
AVER		137

SOURCE: Information extracted from 19th TASS Monthly Activities Rprts, Feb-Dec 68.

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APPENDIX V

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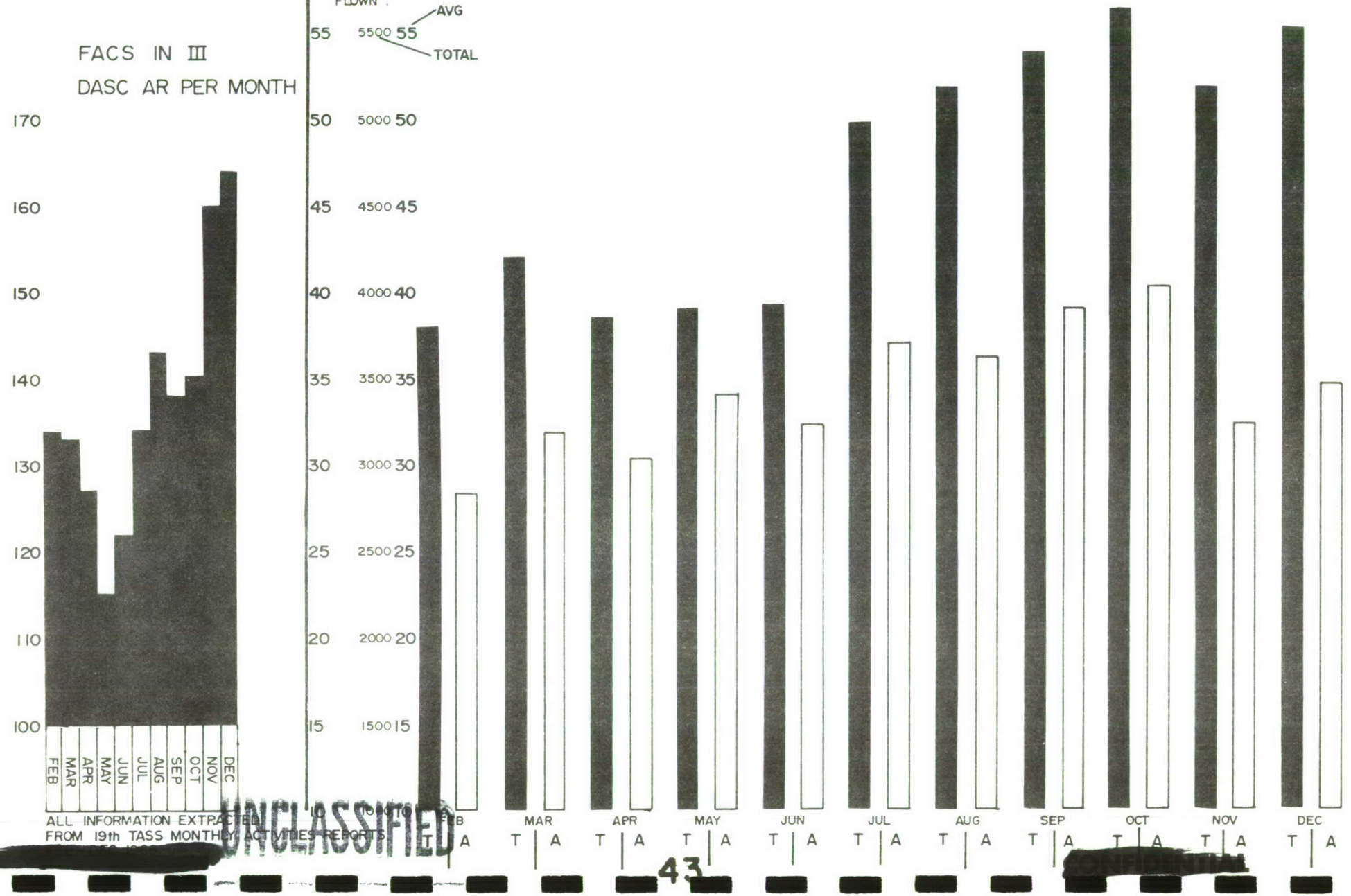
III DASC-FACS PER MONTH, TOTAL SORTIES PER MONTH, AVERAGE SORTIES PER FAC PER MONTH



ALL INFORMATION EXTRACTED FROM 19th TASS MONTHLY ACTIVITIES REPORTS

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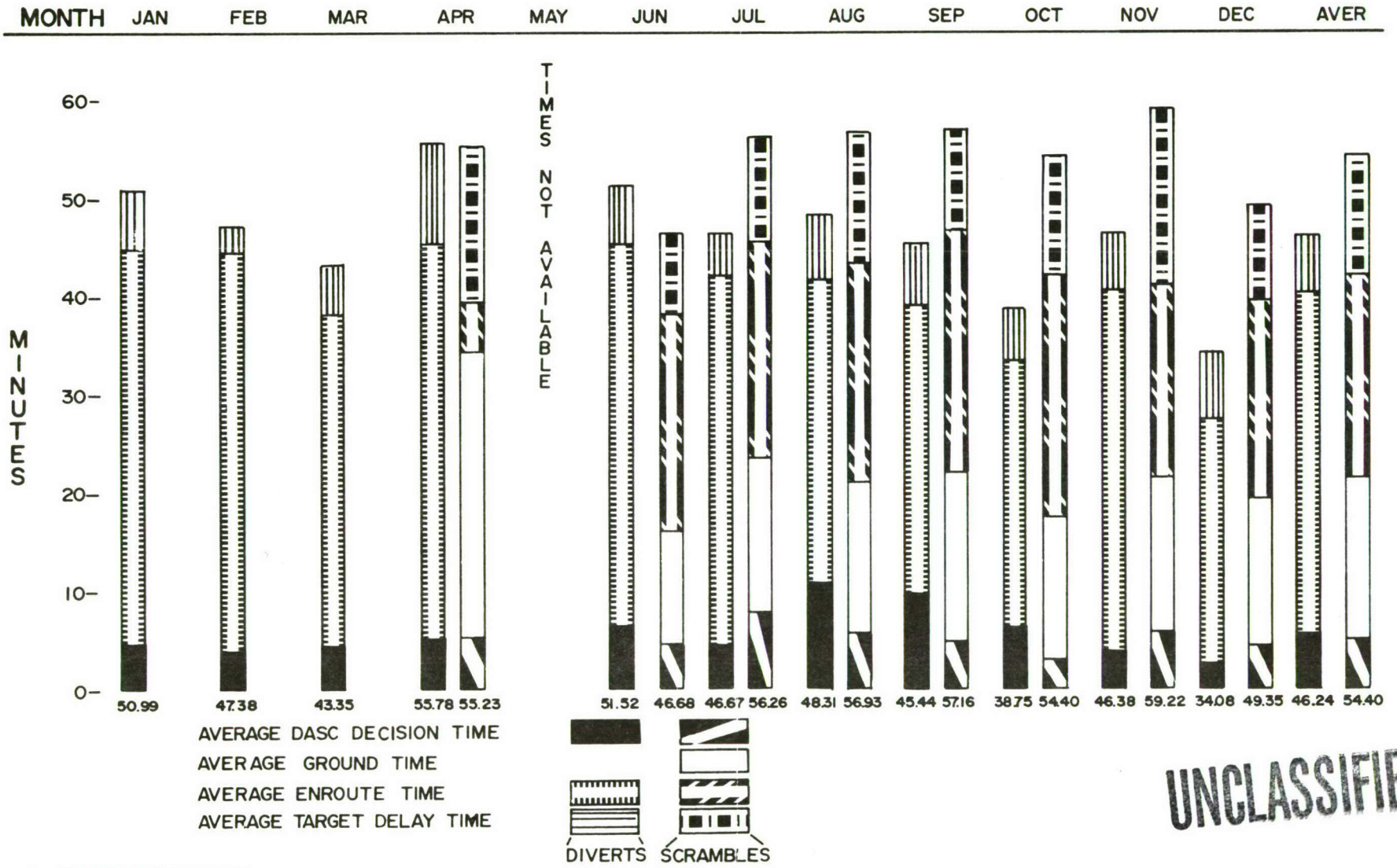
RESPONSE TIME TO IMMEDIATES JAN-APR 1968-TO IMMEDIATE, TROOPS IN CONTACT, MAY-DEC 1968



GLOSSARY

AATF	Australian Army Task Force
ACR	Armored Cavalry Regiment
ACW	Aircraft Control and Warning
ALO	Air Liaison Officer
AO	Area of Operations
AR	Area of Responsibility
ARVN	Army of Republic of Vietnam
BDA	Bomb Damage Assessment
BDE	Brigade
CAP	Combat Air Patrol
CAS	Close Air Support
CIDG	Civilian Irregular Defense Group
CINCPAC	Commander-in-Chief, Pacific Command
CMD	Capital Military District
CRC	Combat Reporting Center
CSF	Camp Strike Force
CTZ	Corps Tactical Zone
DARN	Direct Air Request Net
DASC	Direct Air Support Center
D/O	Duty Officer
DSDT	DASC Decision Time
ET	En Route Time
ETA	Estimated Time of Arrival
FAC	Forward Air Controller
FACOPS	Forward Air Controller Operations
FFV	Field Force, Vietnam
FWF	Free World Forces
FWMAF	Free World Military Assistance Forces
GT	Ground Time
IAS/TIC	Immediate Air Strike, Troops in Contact
JGS	Joint General Staff
MACV	Military Assistance Command, Vietnam
MSF	Mobile Strike Force
NE	Northeast
NVA	North Vietnamese Army

PACAF	Pacific Air Forces
ROE	Rules of Engagement
RSSZ	Rung Sat Special Zone
RTAVF	Royal Thai Army Volunteer Force
RVN	Republic of Vietnam
RVNAF	Republic of Vietnam Armed Forces; Republic of Vietnam Air Force
RVNN	Republic of Vietnam, Navy
SEAITACS	Southeast Asia Integrated Tactical Air Control System
TACC	Tactical Air Control Center
TACE	Tactical Air Control Element
TACP	Tactical Air Control Party
TACS	Tactical Air Control System
TAS	Tactical Air Support
TASS	Tactical Air Support Squadron
TDT	Target Delay Time
TFW	Tactical Fighter Wing
TIC	Troops in Contact
TOC	Tactical Operations Center
TOT	Time Over Target
TT	Total Times
VC	Viet Cong
VNSF	Vietnamese Special Forces